

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P00033725-P0		FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2004/002958	International filing date (day/month/year) 08.03.2004	Priority date (day/month/year) 17.03.2003	
International Patent Classification (IPC) or national classification and IPC			
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>3</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																	
<p>4. This report contains indications relating to the following items:</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/> Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/> Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/> Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/> Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/> Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/> Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/> Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/> Box No. I	Basis of the report	<input type="checkbox"/> Box No. II	Priority	<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/> Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/> Box No. VI	Certain documents cited	<input type="checkbox"/> Box No. VII	Certain defects in the international application	<input type="checkbox"/> Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/002958

Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-4, 6-18 as originally filed/furnished
- pages* 5 received by this Authority on 11.11.2004
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 2-28 as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1 received by this Authority on 11.11.2004
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1-21 as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/002958

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-28	YES
	Claims		NO
Inventive step (IS)	Claims	10, 12, 17, 19, 24, 25	YES
	Claims	1-9, 11, 13-16, 18, 20-23, 26-28	NO
Industrial applicability (IA)	Claims	1-28	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
Document 1: JP 9-88837 A (Matsushita Refrigeration Co.), 31 March 1997			
Document 2: JP 11-341860 A (Matsushita Electric Industrial Co., Ltd.), 10 December 1999			
Document 3: JP 2002-330599 A (Matsushita Electric Industrial Co., Ltd.), 15 November 2002			
Document 4: JP 2001-37281 A (Matsushita Electric Industrial Co., Ltd.), 9 February 2001			
Document 5: JP 2000-78880 A (Calsonic Corp.), 14 March 2000			
Document 6: JP 2002-125387 A (Sanyo Electric Co., Ltd.), 26 April 2002			
Document 7: JP 9-285177 A (Fujitsu General Limited), 31 October 1997			
Document 8: JP 7-87782 A (Toshiba Corporation), 31 March 1995			
<p>The inventions set forth in claims 1 and 8 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report. Document 1 (paragraphs [0064] to [0067]; fig. 2) sets forth a relation between motor speed and torque, wherein the drive region as a DC motor and the drive region as a</p>			

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

synchronous motor are disclosed, and it can be inferred from document 1 that at a predetermined torque, it is possible to operate at a higher engine speed by driving as a synchronous motor rather than driving as a DC motor. Meanwhile, it is common general technical knowledge in the field of motor control that a motor operates more efficiently when driven as a DC motor rather than when it is driven as a synchronous motor. It would therefore be easy for a person skilled in the art to conceive of driving a motor as a DC motor at low engine speed not exceeding a predetermined engine speed, and as a synchronous motor at high engine speed exceeding a predetermined engine speed, in the motor driving method and driving device set forth in document 1.

The inventions set forth in claims 2 to 7, 9, 11, 13 to 16, 18, 20 to 23 and 26 to 28 do not involve an inventive step in the light of documents 1 to 8 cited in the international search report, as stated in the written opinion dated 29 June 2004.

The inventions set forth in claims 10, 12, 17, 19, 24 and 25 involve an inventive step in relation to the documents cited in the international search report, as stated in the written opinion mentioned above.